STATE OF MARYLAND

DHMH

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September 23, 2011

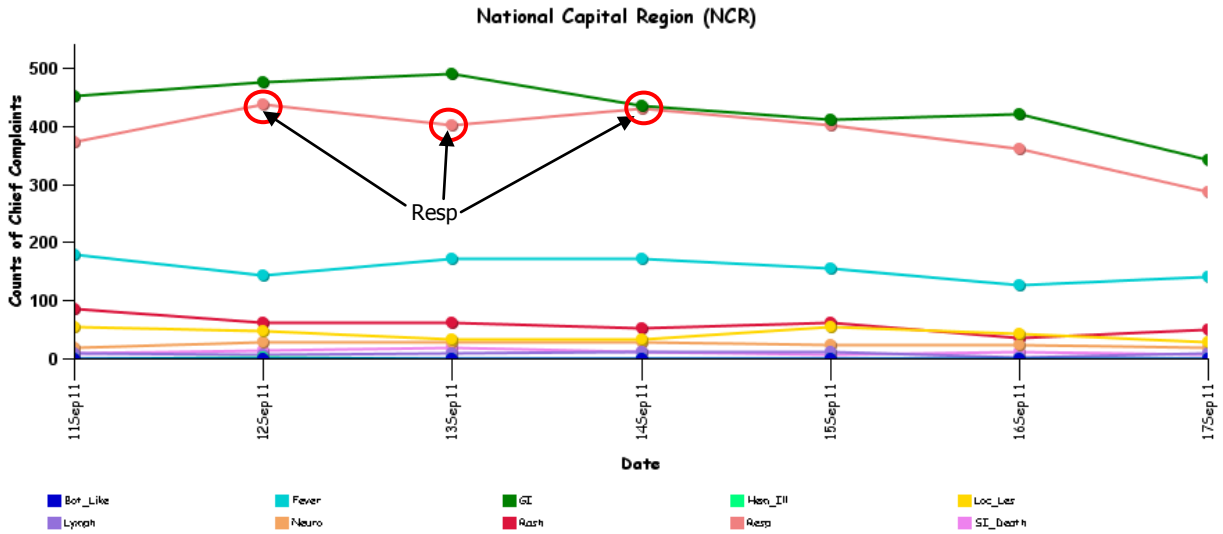
Public Health & Emergency Preparedness Bulletin: # 2011:37
Reporting for the week ending 09/17/11 (MMWR Week #37)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

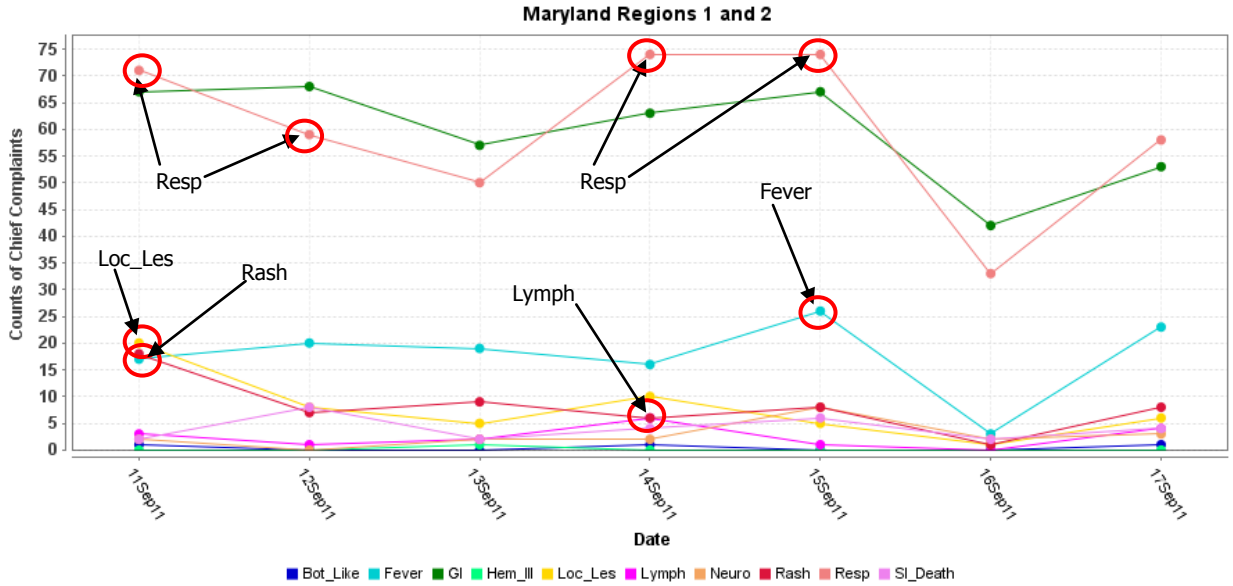
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

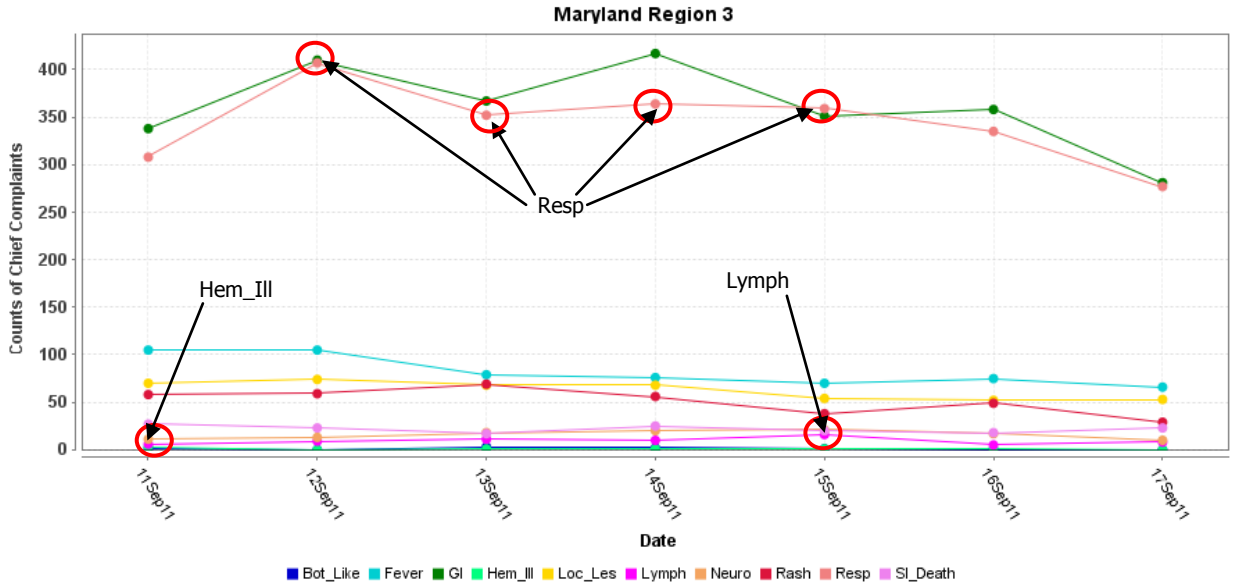


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

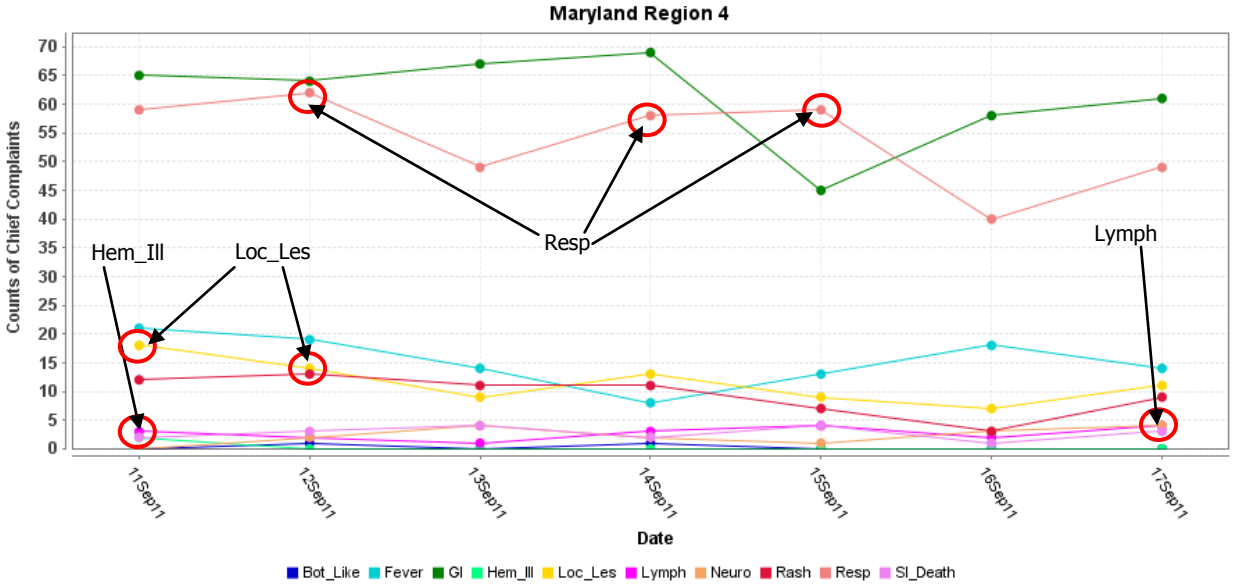
MARYLAND ESSENCE:



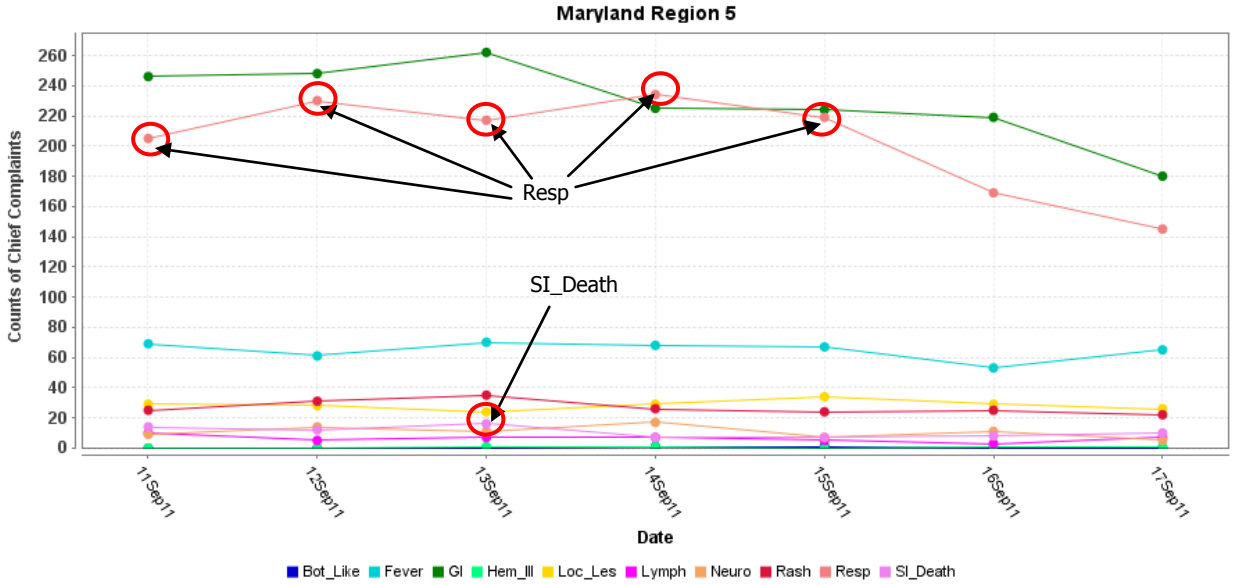
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



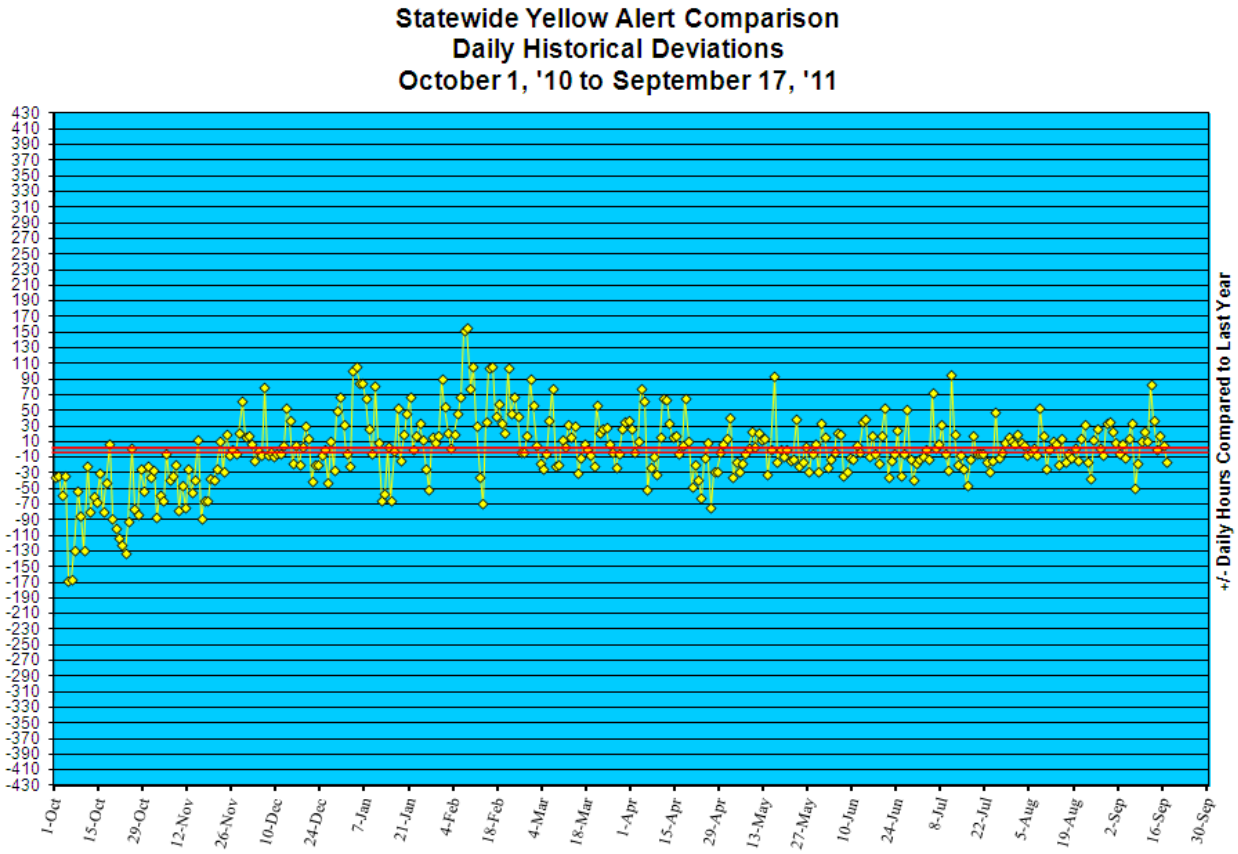
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in July 2011 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (September 11 – September 17, 2011):	9	0
Prior week (September 4 – September 10, 2011):	11	0
Week#37, 2010 (September 12 – September 18, 2010):	28	0

3 outbreaks were reported to DHMH during MMWR week 37 (September 11 – September 17, 2011).

2 Gastroenteritis outbreaks
1 outbreak of GASTROENTERITIS in a Nursing Home
1 outbreak of GASTROENTERITIS in a School

1 Foodborne outbreak
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Private Home

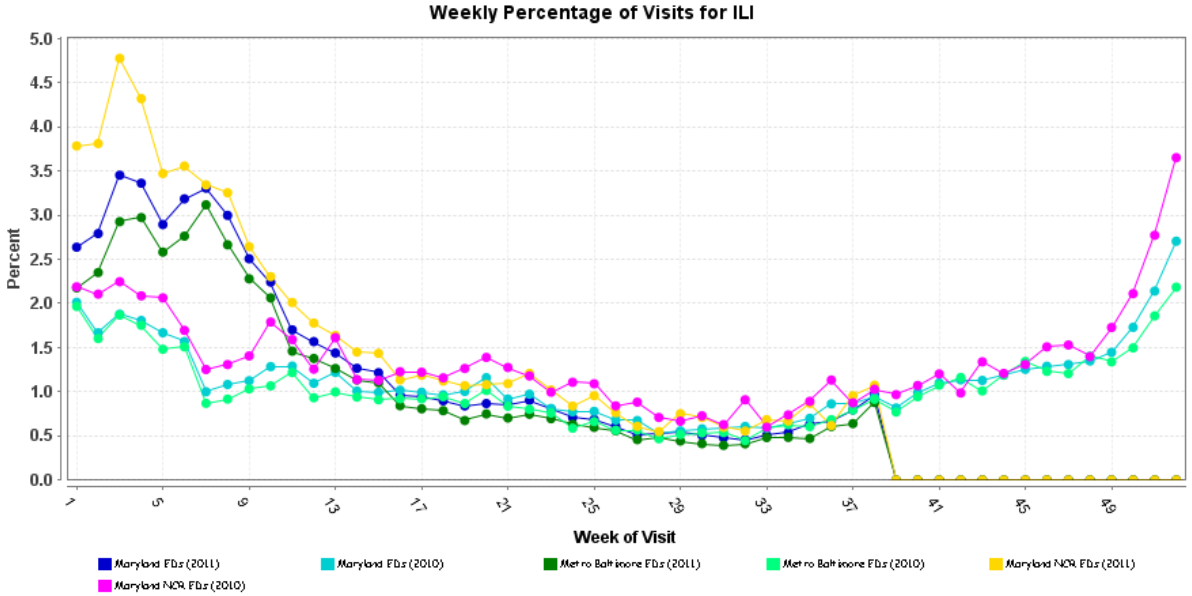
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

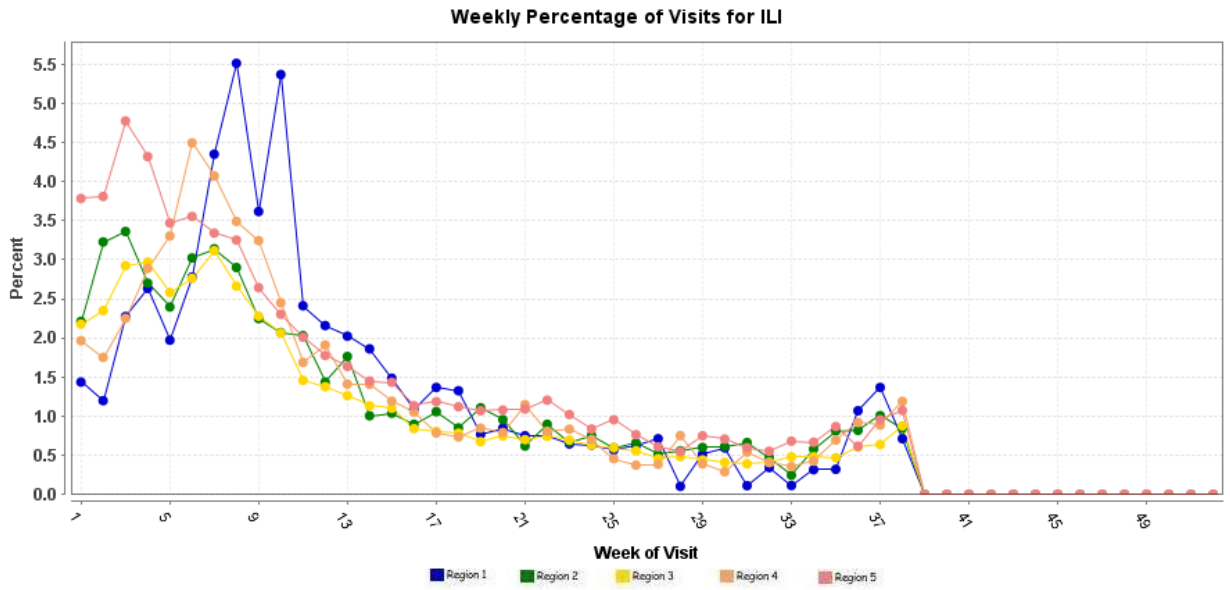
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



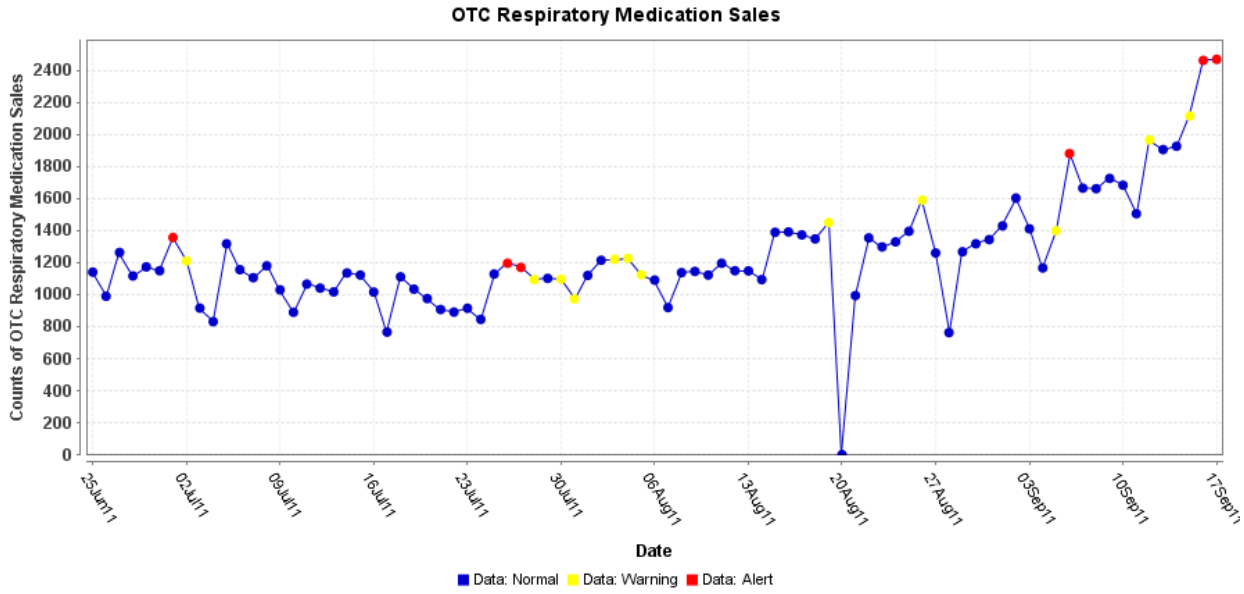
* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

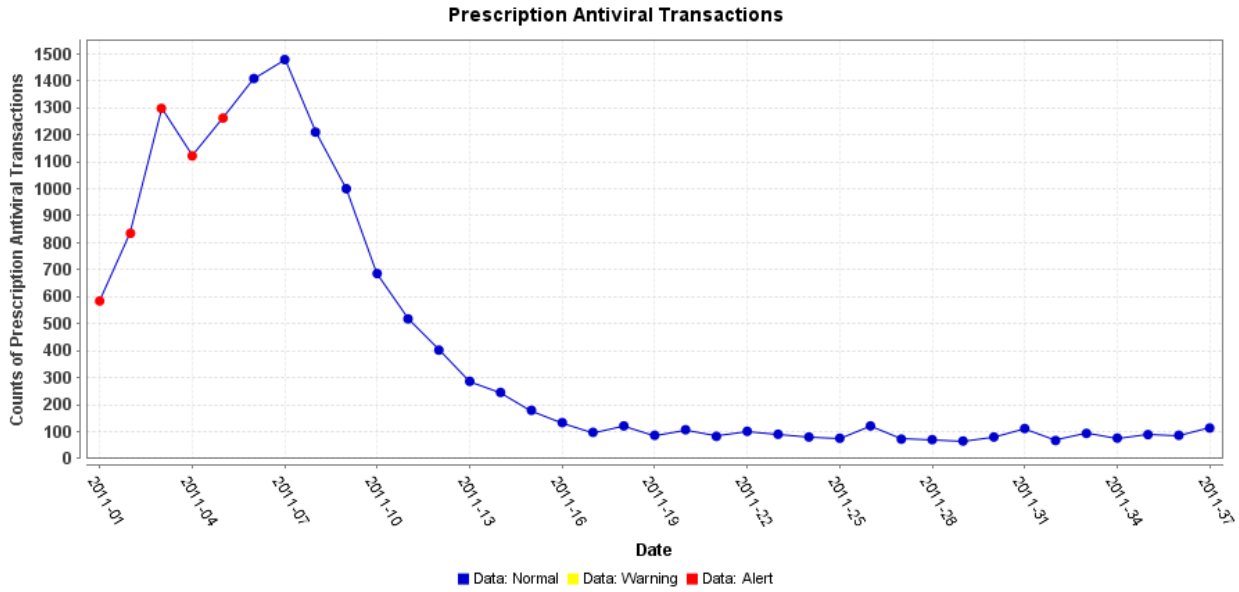
OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PRESCRIPTION ANTIVIRAL SALES:

Graph shows the weekly number of prescription antiviral sales in Maryland.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of September 16, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 564, of which 330 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (INDIA): 15 September 2011, A mild (low pathogenic) variant of avian influenza has been detected in a bird trading business in Zuidwolde (Drenthe). The mild bird flu was found in 83 swans destined for export. The swans, routinely kept "in the wild," are caught before being traded. Low pathogenic avian influenza is very common in wild birds. It is, therefore, not surprising that the swans were found infected; their contamination came to light because they had to undergo testing prior to export. According to European regulations, kept animals which are not defined as "poultry," need not be culled. Since the holding is in an area where poultry farms are scanty, it was decided to keep the animals on the premises, allowing the outbreak to "die out." The holding in Zuidwolde will remain under the supervision of the Food and Consumer Product Safety Authority (WVA) until the animals stop shedding the virus. The infected animals are quarantined, and the other susceptible animals are being checked for infection. The measures remain in place until the infected animals excrete no virus. Further spread of the disease must be prevented. Therefore, a restricted zone of 1 km around the holding in Zuidwolde has been applied. Within the area, transportation of live poultry and eggs is banned. There are no other poultry farms in the area.

NATIONAL DISEASE REPORTS

LISTERIOSIS (USA): 13 September 2011, A listeriosis outbreak has New Mexico health officials on alert. 3 people in the state have already died, 2 men from Bernalillo County and a woman from Curry County. 6 others have been hospitalized. There are 11 similar cases in Colorado and officials there believe the culprit is contaminated cantaloupe. The New Mexico Department of Health says they're working to determine the source of the bacteria, but right now they can't say with 100 percent certainty what caused the outbreak. Experts in Colorado, however, are blaming cantaloupe likely from the Rocky Ford growing region 60 miles [97 km] east of Pueblo, Colorado. Health officials in New Mexico are expediting samples from across the state to the Center for Disease Control. Jim Winchester with the Environment Department said they are hoping to have results in the next 48 hours. That will tell them if the cases are connected. Health experts said listeriosis is relatively uncommon but dangerous. "It's a severe illness...most people, when they get sick, they already have a blood stream infection so they need to get medical attention and it can be successfully treated with antibiotics," said Dr Michael Landen, an epidemiologist with the New Mexico Department of Health. Symptoms include fever and muscle aches and can also include diarrhea, headache, stiff neck, and convulsions. Dr. Landen said there are 4 high-risk groups that need to stay away from cantaloupe right now: adults over the age of 60, pregnant women, infants, and those with weakened immune systems. He explained after exposure, it can take between a couple days and up to a month to show symptoms. As of right now there are no recalls to report. Health officials in Colorado are advising consumers to wash and dry the outside of melons before cutting. (Food Safety Threats are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI (WI): 14 September 2011, A person from Green County has died in an *E. coli* outbreak that appears to be isolated in that southwestern Wisconsin county, according to a state health official. The Capital Times on Wed 14 Sep 2011 reported the death as a 20-month-old child who died Sunday [11 Sep 2011] at UW Children's Hospital in Madison. The state and the Green County Health Department are investigating 9 confirmed *E. coli* O157:H7 infections in Green County, reportedly scattered around the county. A common source of exposure has not been identified, said Beth Kaplan, spokeswoman for the state Department of Health Services. "The state lab has done testing to confirm the *E. coli* isolated from stools has the same DNA fingerprint," she said. Young children and the elderly are particularly vulnerable to *E. coli* O157:H7, which can cause a potentially fatal form of kidney failure, hemolytic uremic syndrome. Hemolytic uremic syndrome primarily attacks the red blood cells and kidneys. Two patients in this outbreak have been diagnosed with hemolytic uremic syndrome, Kaplan confirmed. The outbreak started in mid-August 2011, and the most recent case was reported in early September 2011, Kaplan said. She added that the cases appear isolated in Green County. (Food Safety Threats are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

MURINE TYPHUS (CA): 14 September 2011, A total of 5 people in Orange County [O.C.], including one under 18, have been diagnosed with confirmed or probable infections caused by flea-borne typhus during the past 3 months, the county's Health Care Agency [HCA] reported Wednesday [14 Sep 2011]. Symptoms include fever, headache, muscle aches and a rash on the chest, back, arms or legs. The disease is treatable with antibiotics, but it can be fatal if left untreated, says Michael Hearst, district manager for the county's Vector Control. The disease, also known as endemic typhus, isn't passed from person to person. Instead, it's transmitted by the bites of infected fleas. In most of the O.C. cases the past few years, people have been infected by a family cat, although other animals can carry the fleas, including rats, opossums and raccoons. "Everybody we talked to had adopted a feral cat, or had a cat that was in and out a lot," Hearst said. "Between 1994 and 2005, there were no reported cases of flea-borne typhus in the county. There was one case in 2006, 6 in 2007, 15 in 2008, and 6 cases each in 2009 and 2010. We've had more cases in the last 3 years than in the previous 50," Hearst said. There have been 8 reported cases in 2011. Of the 5 in the last 3 months, 4 were adults and one was under 18, HCA said. All live in North County, although infected animals can be found in any part of the county. (Typhus Fever is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

CRIMEAN CONGO HEMORRHAGIC FEVER (PAKISTAN): 17 September 2011, A total of 4 people, including a surgeon and a medical technician, have fallen victim to haemorrhagic fever in Quetta. Reports said a patient suffering from Congo virus [Crimean-Congo haemorrhagic fever virus (CCHF) infection] was brought to Quetta from Afghanistan for surgery. He was being operated on by senior surgeon Dr Mohammad Ayaz at a private hospital when he [Dr Ayaz] got infected with the virus as well. A medical technician who was assisting the surgeon also got infected. Dr Ayaz was immediately moved to Karachi for treatment, despite the fact that isolation wards have been established for such patients at Fatima Jinnah Hospital in Quetta. The technician, however, was being treated in an isolation ward at the hospital. Reports further said that another 2 patients [with CCHF virus infection had been] admitted to Fatima Jinnah Hospital. Dr Aadam, the [physician] in charge of the isolation ward, said that another 2 patients, including an Afghan refugee and a youth from Kuchlak, were also suffering from [CCHF virus infection]. He said there was a possibility that more attendants and medical staff [would become infected] with CCHF virus while treating these patients. The doctor said [CCHF] was a dangerous disease and doctors in the hospital lacked proper equipment to protect themselves from it. He said over the past 4 years, members of the staff had not been vaccinated. [No vaccine is currently approved for human use. - Mod.CP] (Viral Hemorrhagic Fevers is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

MELIODOSIS (TAIWAN): 5 September 2011, The 1st fatal case of melioidosis in 2011 was reported in Kaohsiung in southern Taiwan, the Centers for Disease Control (CDC) said Thu 15 Sep 2011, urging people to keep the environment clean and avoid direct contact with contaminated soil and water. There have been 15 confirmed cases of melioidosis and 9 suspected ones nationwide as of 15 Sep 2011, with most of them concentrated in Kaohsiung City [Kaohsiung Special Municipality] and Pingtung County [Taiwan Province], said CDC Deputy Director Shih Wen-yi. One of the 2 people who have died from melioidosis is a 69-year-old diabetic

living in Zuoying District in Kaohsiung, who was confirmed to have died from the disease. The other is a 61-year-old from Nanzih District with chronic illnesses who died from a suspected case of melioidosis. Shih said the bacterium that causes melioidosis is found in contaminated water and soil. Humans acquire the infection through direct contact with the contaminated source, especially through skin abrasions. It is very rare for people to get the disease from another person. Melioidosis has a latency period of 2 days to several years. Symptoms include skin ulcers, pneumonia, or septicemia, according to Shih. People should wear rain shoes or waterproof boots and gloves when they are near a contaminated environment to avoid infection. (Water Safety Threats are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

JAPANESE ENCEPHALITIS (INDIA): 13 September 2011, With the death of 3 more children in a hospital here today, Japanese encephalitis has claimed 24 lives in Bihar during the past 3 weeks, official sources said. The 3 children died in the Anugrah Narayan Sinha Medical College-cum-Hospital, its Superintendent Sitaram Prasad said. A total of 84 patients, including 25 children, are currently undergoing treatment in the hospital, Prasad said, adding that their blood tests had confirmed the disease. He said that most of the patients had come from Gaya, Aurangabad and Nawada districts of Bihar and Chatra district of Jharkhand. The death toll from JE virus infections in Gaya has gone from 16 on 11 Sep 2011)to 25 just 2 days later. All are attributed to JE virus, with no mention of the acute encephalitis syndrome of undetermined etiology previously mentioned in recent reports from northeastern India. There is still no mention of the JE vaccination status of this population. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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